

# HYDRO-CHECK TUNING

## P600 & P610 series machines

### Series B171-2 Schrader Bellows Hydro-Check

#### Adjustment of Checking Rate

**NOTE** *This adjustment should not be made before confirming that the air supply to the machine is in the normal operating range (80 psi). Be aware of the fact that changing the rate of the arms will change their stop position and may require adjustment to the limit switch on the core diameter sensing roller.*

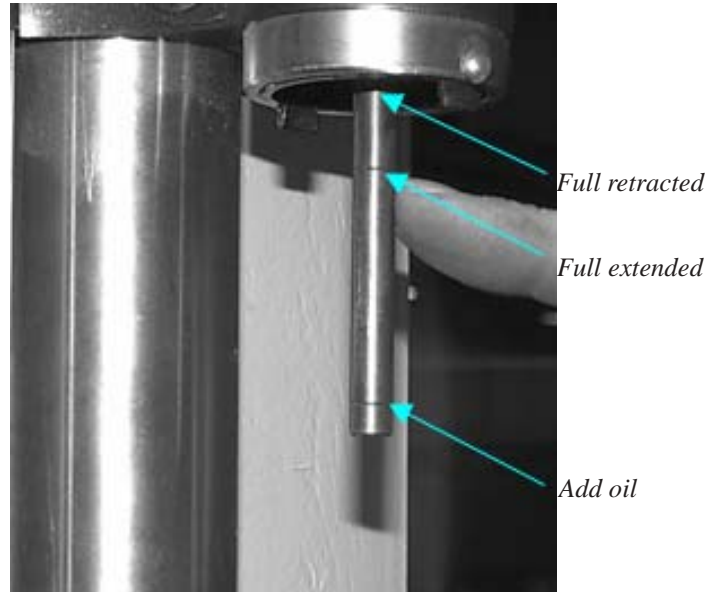
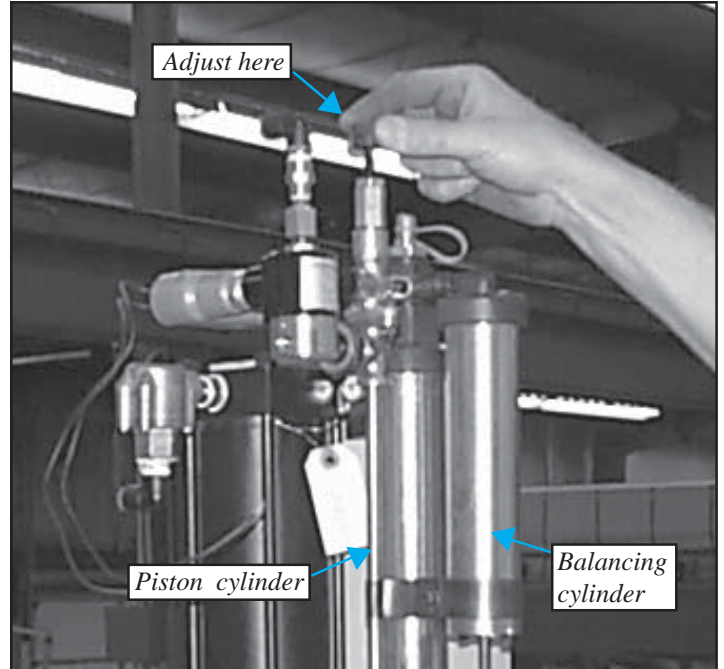
The speed at which the P6 support arms close is controlled by turning the knurled needle valve knob (as shown in the picture @ right). As the knob is turned clockwise, the speed is reduced. Turn the knob counterclockwise to increase the closing speed.

#### Checking Hydro-Check Oil Level

The amount of oil in the Hydro-Check is indicated by the position of the balance cylinder indicator rod. The rod has grooves for measurement. With the piston rod extended, the second indicator groove should be flush with the cylinder head. When the piston rod is retracted, the third inner most groove should be flush with the piston head.

Oil should be added when the groove nearest the end of the rod becomes flush with the cylinder head when the piston rod is fully extended.

**NOTE** *Use Schrader Bellows F442 hydraulic oil or automatic transmission fluid.*



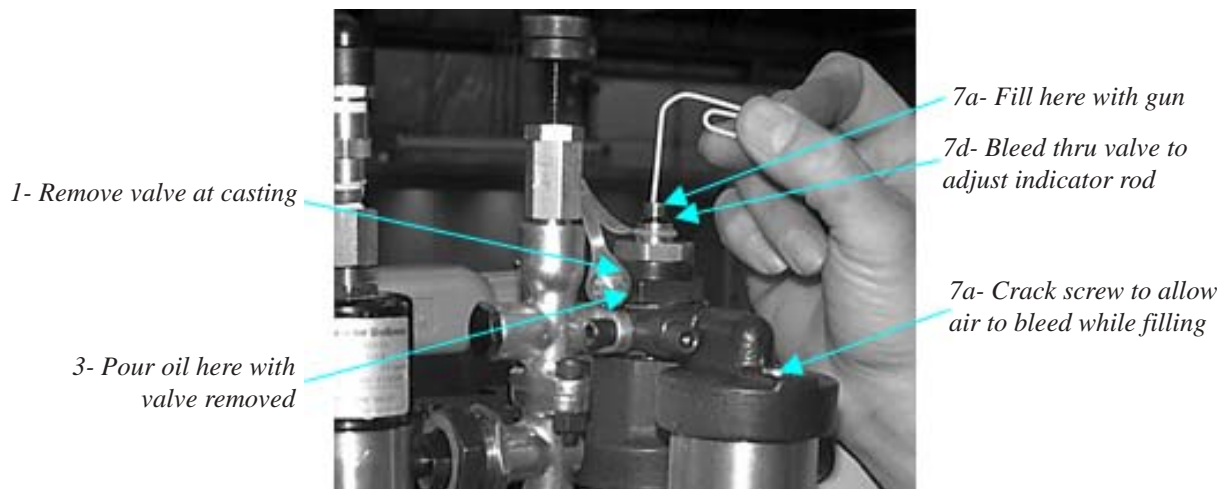
**Appleton**  
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## Adding Oil

- 1- Remove the filler cap.
- 2- Stand the Hydro-Check upright with the piston rod extending down (this is the normal mounted position on the P6).
- 3- Fill the main cylinder by slowly pouring oil into the cylinder until the oil is level with the filler valve opening.
- 4- Move the piston rod in and out slightly (1/16" to 1/8") to release any trapped air.
- 5- Allow the Hydro-Check to stand upright for a short period of time to allow any air bubbles to escape.
- 6- Replace the filler cap.
- 7- Bleed to remove all traces of air by;
  - A> filling the Hydro-Check with gun until oil bleeds from the small hole in the balance cylinder. (tip gun upright and bleed air before attaching valve).
  - B> slowly cycle the piston rod.
  - C> allow the unit to stand while air escapes.
  - D> bleed air using a small rod (a paper clip works well for this procedure) to open fill valve.
  - E> fill again and allow a clear stream of oil to flow from the small hole in the balance cylinder.
  - F> use the small rod to release a small quantity of oil from the fill valve so the third groove in the indicator rod is flush with the cylinder head with the piston rod retracted.



## After Refilling or Adjusting Hydro-Check

If you have changed the flow rate, you may have effectively changed the locked down position of the support arms. Check this by moving the carriage to a position near the support arm in manual mode and checking that the shaft is being properly supported when the support arms close. The shaft should not be deflected upward or allowed to sag. Refer to your Maintenance Manual for instructions on setting the limit switch in the core OD sensor.

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